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(71) Applicant (for all designated States except US): KONIN-KLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventors; and
(75) Inventors/Applicants (for US only): SHTEYN, Eugene [US/US]; 1109 McKay Drive, M/S-41SJ, San Jose, CA

95131 (US). VARSHNEYA, Rajeev [NL/US]; 1109 McKay Drive, M/S-41SJ, San Jose, CA 95131 (US).

(74) Common Representative: KONINKLIJKE PHILIPS ELECTRONICS N.V.; c/o LESTER, Shannon, 1109 McKay Drive, M/S-41SJ, San Jose, CA 95131 (US).

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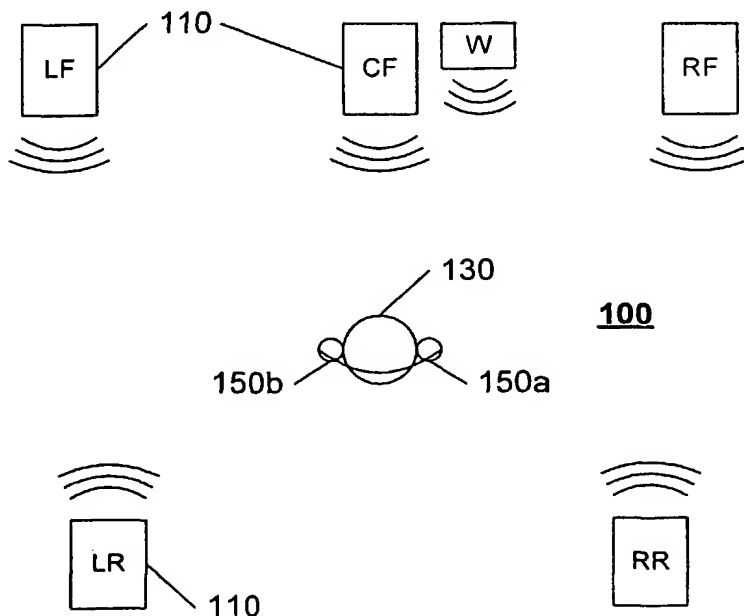
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(54) Title: PERSONALIZED SURROUND SOUND HEADPHONE SYSTEM

(57) Abstract: A system and method determines parameters (170) for rendering headphone audio information, based on a user's preferred acoustic rendering in a non-headphone environment. A user configures a loudspeaker-based system for a preferred ambiance. Microphones (150) on a head-mounted device then detect the audio signals received by the user in this environment. These detected signals are compared to the audio information that is being provided by the user's audio system and the differences are used to characterize the user's particular environment. Based on this characterization, when the user uses a headphone device (250) to listen to the audio information, a headphone driver (260) modifies the audio information to produce audio signals at the speakers in the user's headphone (250) to effectively reproduce the audio signals that would have been produced at the user's ears by the loudspeakers

(110) in the user's particular environment.